



Frozen-Ground Cartoons: An international collaboration between artists and permafrost scientists

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Permafrost is a hot-topic in climate research, but apart from people living in cold region communities and the scientific community, people know very little about what permafrost is, how we study it and what is happening to it under a warming climate.

This project was started almost three years ago by young researchers from Europe and Canada to communicate knowledge and science about an underground phenomenon that keeps showing up in the news headlines. Two artists: Noémie Ross (Canada) and Heta Nääs (Finland) created 22 pages of first class outreach material with the input from scientists. Frozen-Ground cartoons are a set of beautiful, artistic, humoristic, and pedagogic comics that aim to explain the consequences of climate change in permafrost regions. They address how climate change and thawing permafrost impacts northern communities, infrastructure, wildlife and greenhouse gas emissions. The printed comics also include a glossary about permafrost. The target audience is kids, youth, parents and teachers who want to learn more about the cold North.

Printed comics are now being distributed to school kids, the general public and scientist at various events in Europe and North America. The comics are also available as a free download on the project webpage: <https://www.frozengroundcartoon.com> and printed copies will be handed out at the poster. The project will now enter its second phase and some of the goals include: to distribute the comics as wide as possible, to translate the comics to local languages and to evaluate the effectiveness for science communication in collaboration with schools and pedagogic experts. The second phase will also see a series of augmented reality material to interact with the comics.